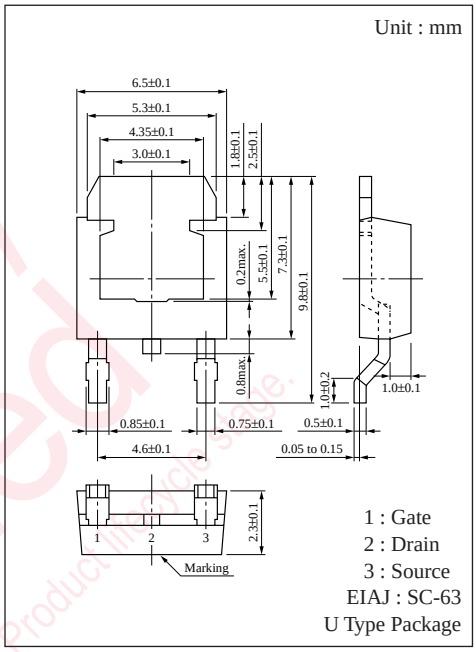
2SJ0398

Silicon P-Channel MOS

For DC-DC converter
For motor drive



■ Features

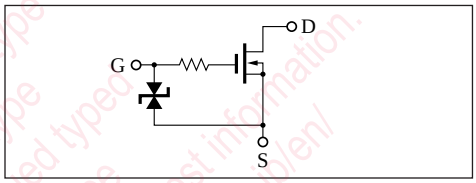
- Low ON-resistance $R_{DS(on)}$
- High-speed switching

■ Absolute Maximum Ratings (Ta = 25˚C)

Parameter		Symbol	Rating	Unit
Drain-Source breakdown voltage		V_{DSS}	–30	V
Gate-Source voltage		V_{GSS}	±15	V
Drain current	DC	I_D	–2	A
	Pulse	I_{DP}*	–8	A
Allowable power dissipation	Ta = 25˚C	P_D	0.75	W
	T_C = 25˚C	P_D	10	
Channel temperature		T_{ch}	150	˚C
Storage temperature		T_{stg}	–55 to +150	˚C

* t ≤ 200µs, Duty Cycle<10%

■ Internal Connection



■ Electrical Characteristics (Ta = 25˚C)

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Drain-Source cut-off current	I_{DSS}	V_{DS} = –25V, V_{GS} = 0			–10	µA
Gate-Source leakage current	I_{GSS}	V_{GS} = ±15V, V_{DS} = 0			±10	µA
Drain-Source breakdown voltage	V_{DSS}	I_D = – 0.1m, CV_{GS} = 0	–30			V
Gate threshold voltage	V_{th}	V_{DS} = –5V, I_D = –1mA	– 0.8		–2.0	V
Drain-Source ON-resistance	$R_{DS\ (on)}$ 1	V_{GS} = 4V, I_D = 1A		0.35	0.5	Ω
	$R_{DS\ (on)}$ 2	V_{GS} = 10V, I_D = 1A		0.25	0.4	Ω
Forward transadmittance	|Y_{fs}|	V_{DS} = 10V, I_D = 1A	1.5			S
Input capacitance	C_{iss}	V_{DS} = 10V, V_{GS} = 0, f = 1MHz		320		pF
Output capacitance	C_{oss}			200		pF
Feedback capacitance	C_{rss}			105		pF
Turn-on time	t_{on}	V_{GS} = 10V, I_D = 1A V_{DD} = 10V, R_L = 10Ω		60		ns
Fall time	t_f			280		ns
Turn-off time (delay time)	$t_{d\ (off)}$			280		ns

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